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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/629,780

07/30/2003

Jose Luis Valero

60019446-2

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08/15/2005

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EXAMINER

NGUYEN, THINH H

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/629,780	Applicant(s) VALERO ET AL.	
	Examiner Thinh H. Nguyen	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-20 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/23/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on May 23, 2005 has been entered.

Claim Objections

2. Claims 17, 19 are objected to because of the following informalities: "a common processor" should have been "a common optical detector". Appropriate correction is recommended.

Claim Rejections - 35 USC § 112

3. Claims 1-9 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following limitations lack antecedent basis:

"the predetermined pattern" (claim 1, line 8).

Claims 2-9 are rejected as being dependent from the rejected base claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-6, 8-19 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lund et al. (U.S.6,312,082)

Lund (fig.3, see also claims) discloses elements of the instant claimed apparatus and method of detecting fixer fluid on the print media, comprising:

using a fixer printhead (115F) comprising a plurality of fixer nozzles to apply fixer in a plurality of spaced parallel lines (see 305,fig.3) to a region of the media, each line being applied by a respective fixer nozzle;

before or after the application of the fixer (as described as over-print or under-print technique; col.5, lines 39+), applying ink to said region of the media whereby the locations where both fixer and ink are present are optically distinguishable from the locations where only ink is present (col.5, lines 46-53); and

optically detecting the predetermined pattern (as optically sensed by photodetector 211 and 205 of module 201; col.4, lines 63-64).

Re claim 2, wherein the parallel lines are arranged in columns, immediately adjacent nozzles being arranged to print lines in adjacent columns and immediately adjacent lines in the same column being arranged to be printed by nozzles which are

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separated by n further nozzles, wherein n is an integer (fig.3, see space between element 305).

Re claims 4, 6, wherein the period (as disclosed by Allen U.S.5,635,969 , col.6, line 1-17 which is incorporated by Lund in the background art) is selected such that bleeding of the fixer and ink substantially does not occur.

Re claim 5 (see Allen above), wherein the steps of applying fixer and ink to said region occur within a period of thirty seconds or less.

Re claims 8, 9, wherein the ink is magenta color and the media is glossy; and wherein the ink is black and the media is plain or bond (col.5, line 37, line 43; see also glossy media described as transparency in Allen) .

Re claims 15-20, as described by Lund (col.3, lines 14-15) , a common detector connected to a processor (col.4, line 8) besides used to check alignment of fixer pen and ink pen also used to check the operation of the fixer and ink nozzles as described by determining their presence.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lund in view of Hubbard et al. (U.S.4,907,013)

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Lund discloses elements of the instant claimed subject matter as noted above with the exception of the detector is a line detector.

Hubbard (col.3, line 55 – col.4, line 25) suggests the use of a line detector to detect a failed nozzle of the inkjet printhead, and the nozzle spacing $n=3$. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use nozzle spacing and a line detector among a plurality of known detectors as suggested by Hubbard in the apparatus of Lund for the purpose of obtaining a particular print resolution and for detecting malfunction nozzle of the printhead.

Allowable Subject Matter

8. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the teaching relied upon by the Examiner do not suggest the ink and fixer are applied to the media in an ink/fixer ratio between 2 to 1 and 1 to 2 by volume. These limitations are neither suggested nor taught by the prior art of record, alone or in combination as claimed.

Patent Application Information Retrieval (PAIR)

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Contact Information

11. Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Wed, and Thurs from 9:00A – 5:00P. The official fax phone number for the organization is (571) 273-8300. The examiner supervisor, Dave Talbott, can also be reached at (571) 272-1934.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.



Thinh Nguyen
August 9, 2005

Thinh Nguyen
Primary Examiner
Technology Center 2800